

NORTH DAKOTA UNIVERSITY SYSTEM

Facilities Management System

Post-Implementation Report

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INTRODUCTION

The Post-Implementation Report contains an analysis from the Post-Implementation Survey sent to various project team members. This survey was sent to the individuals who were most heavily involved in or performed a major role in the project. Individuals included members of the Steering Committee, Core Team, Vendor, Data Center staff, and Developer staff. A request was sent to individuals who were members of either the Steering Committee or Core Team listservs. Additional individuals had been sent the survey and fifteen surveys were returned.

Survey questions were rated on a scale of 1 to 3 with 1 being low and 3 high. Results were calculated based on all responses that were not listed as N/A. The rating was derived from the responses (1, 2, or 3) to each question answered divided by the total number of respondents. Each section was then scored based on all the questions answered in the section with a 1, 2, or 3 divided by the total number of respondents. The rating gives an indication of satisfaction and defines areas where improvements are needed. Included are some of the comments that were expressed in the survey and in some cases a general statement was made to cover a group of comments made with the same theme but stated in different ways. Not all comments are included as this report was to provide a snapshot of comments, not everyone's comments.

Attached as an appendix (Appendix A) is a sample copy of the survey that was distributed to key project team members. This survey is being used on all projects to determine the effectiveness of project management.

A. SYSTEM EFFECTIVENESS

The Facilities Management System successfully meets many of the NDUS Facilities/Physical Plant Departments needs. Survey responses indicated a general satisfaction with the system, but a couple respondents commented on the difficulties with the learning curve associated with a new system. While the system did go-live on time, there is still some tweaking of the interfaces, and additional reports that need to be developed. During the implementation phase, and shortly after go-live, there had been a number of occasions when the system was either not available or was unstable. This caused a lot of frustration with the system and slowed down the ability to get the system ready for go-live as had been planned. While the system is considered implemented and operational, additional work is required and will

be performed as part of the normal/on-going operations of the system. Items agreed upon as being needed for go-live were in place for go-live.

An impact on this system was the fact that a delayed ConnectND PeopleSoft implementation caused a “ripple” effect in that development staff was not available to develop the interfaces and reports. This development was contracted for through the vendor; however, it required some communications with in-house personnel who were tied up in the ConnectND PeopleSoft implementation. This slowed the process down to where interfaces and reports that were needed but not required for go-live were held off on until a later date after go-live. This caused concerns for some as they were not able to see the whole process end-to-end themselves; although, project staff had performed tests of the system and had verified that the functionality was in place.

One additional item that impacted this project was a change in the Steering Committee membership between the planning phase and the implementation phase of the project. This caused delays in the project, created uncertainty for those involved in the planning phase that what had been expected for outcomes in planning were still true in implementation, and that what had been expected as how the organization would operate in the future was still valid. The project lost momentum and floundered during the time it took for a “champion” of the project to take that role.

Comments provided on survey responses ranged widely based, I believe, on respondent’s perception of what the system was going to do for them instead of what had been defined in the RFP.

If I were to sum up this section, I would sum it up with the following comment provided by one respondent. “Team members showed tremendous growth in knowledge and expertise throughout this project. Future projects should make every effort to capitalize on the individual strengths of Team members and to encourage greater ‘large picture’ understanding. Many new opportunities come with a project of this scope and success relies on the support and availability of individuals willing to pursue those opportunities.”

Overall Survey Rating:

2.17

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

B. COST, SCOPE, SCHEDULE, AND QUALITY MANAGEMENT

Throughout this project, project management processes were used to manage the costs, scope, schedule, and quality. Change control forms were used for changes and a Changes, Risks, and Issues Log was regularly maintained to track such items.

Project Cost

The project cost as of June 30, 2005, was greater than had been budgeted. The majority of expenses had been incurred by then and the project was in its wrap-up phase with go-live July 6th through July 13th. Original new funds budget for this project was \$1,274,531.

| | Original Budget | 4/14/05 Revised | 6/30/2005 Actual |
|----------------------------------|------------------------|------------------------|-------------------------|
| Vendor Software & Implementation | \$582,003 | \$850,206 | \$847,208 |
| Hardware | \$138,000 | \$138,000 | \$118,172 |
| Software | \$45,000 | \$45,000 | \$33,515 |
| Personnel | \$434,528 | \$419,403 | \$353,928 |
| Other | \$75,000 | \$75,000 | \$92,024 |
| Project Funded Exp. | \$1,274,531 | \$1,527,609 | \$1,444,846 |
| | | | |
| Reserved Funds | | | \$21,675 |
| TOTAL | \$1,274,531 | \$1,527,609 | \$1,466,521 |

In comparing the original cost estimate for the project funded budget vs the cost at completion, there is a cost overrun of \$191,990. Implementation cost includes \$94,884 in prepaid maintenance for FY06. Removing the prepaid maintenance cost brings the overrun to \$97,106. The majority of these costs were incurred due to unavailability of in-house development staff to develop interfaces and reports that were necessary for go-live.

Indicated above is a reserve funds in the amount of \$21,675 from the project budget. These funds were being held to cover payment of work that had been included in the project; however, invoices had not yet been received.

Project Scope

There were Fourteen Change Requests that were approved by the Facilities Steering Committee during the project.

| ID | Description | Impacts |
|-----------|---|---|
| 1 | Add the implementation of the FAMIS AutoCAD interface. | Budget impact is \$7,685. Not required for go-live; however, would be nice. |
| 2 | Seeks additional \$22,095 in campus or NDUS funds to cover increased FAMIS implementation costs. | Budget impact is \$22,095. Funds were found internal to budget. |
| 3 | Add the implementation of the FAMIS Self Service module. | Impact is on staff resources (Work Control Team) and FAMIS. |
| 4 | Add Julie Ennen to the Inventory Functional Team. Add David Meyer to the Purchasing Functional Team. | Impact would be on Purchasing Team, FAMIS, and possibly budget (backfill not yet quantified). |
| 5 | Extend end date of the installation task to November 30, 2004 to allow for the complete ancillary infrastructure to be installed. | Impact on data conversion task. Data will be loaded in December and does not impact Team's analysis of the data. |
| 6 | Add 3-4 day installation site visit by FAMIS partner Efficient Computing. | Budget impact of \$3,825. This change order was closed after HECN stated a site visit was not necessary. |
| 7 | Stagger the FAMIS cutover at NDSCS, NDSU, and UND to allow each campus to go live with vendor and team support on site. | Coordinated team planning and 24 additional FAMIS hours of support for a budget impact of \$4,355. Approved the use of vendor and travel contingency dollars. |
| 8 | FAMIS has spent more hours than originally estimated, causing a budget shortfall. | Budget impact of \$4,462.50. Approved the use of campus contributions. |
| 9 | Add 40 hours FAMIS telephone/WebEx consulting time for Team and Cutover Plan support. | Budget impact of \$6,000. Approved but with concerns to monitor hours closely. |
| 10 | This change request addresses the budget shortfall due to interface and report development along with AutoCAD proposed solution. First estimate was \$173,452. Final projected shortfall addressed by this change request was \$147,423. | Impacts on the budget of \$173,452 possible. Facilities Steering Committee reduced the impact by offsetting backfill payments to their campuses. |

| | | |
|----|--|--|
| 11 | Provide \$21,000 additional funding for reports required at or shortly following go-live. This sum was cost for twelve of fourteen identified reports. | The project budget and ConnectND budget will be impacted to address reporting needs. |
| 12 | Change the Vendor and Cost Account Distribution interfaces to accept CSV format files from PeopleSoft. | Budget impact of \$3,000. Additional development required by FAMIS. |
| 13 | The Labor/Personnel Team requests schedule adjustment of payroll entry into FAMIS until August 1, 2005 to allow more time for testing of the payroll interface and PeopleSoft loading processes. | Current Payroll procedures will continue through July 31, 2005. The first payroll period processed in FAMIS will be August 1-15, 2005. |
| 14 | Scripts are needed to move the interface files between the FAMIS database and HECN's new secure ftp server. | Budget impact \$3,000. Additional development time required. |

Project Schedule

The project schedule showing actual start and finish times for milestone segments is shown below.

| WBS ID # | Task Name | Actual Start | Actual Finish |
|-----------------|--|---------------------|----------------------|
| | NDUS FACILITIES PROJECT | 05/05/2004 | 07/13/05 |
| 1 | Initiating and Planning | 05/05/2004 | 07/08/2004 |
| 2 | Software Installation | 07/01/2004 | 07/08/2004 |
| 3 | Business Requirements Definition | 05/03/2004 | 12/03/2004 |
| 4 | Interfaces | 07/05/2004 | 06/24/2005 |
| 5 | Data Conversion Analysis | 07/01/2004 | 02/03/2005 |
| 6 | Business Process Testing, Procedures, plan go-live | 01/10/2005 | 05/20/2005 |
| 7 | Training | 05/16/2005 | 06/29/2005 |
| 8 | Just In Time Data Conversion | 06/30/2005 | 06/30/2005 |
| 9 | Go-live | 07/06/2005 | 07/13/2005 |

The project met the go-live dates of July 6, 2005 through July 13, 2005. This time frame allowed for the vendor and key project Team members to be at each of the institutions to assist the institution with go-live. This was greatly appreciated by both the teams and the campus staff. Teams learned from each campus going live, and the campuses had additional individuals that knew the system and were able to assist during this stressful time.

Project Quality

Quality of the project was brought to fruition by the individuals that were involved in the project. A Quality Management Plan was devised and explained to the individuals involved. One individual stated, "A document outlining NDUS best practices and expectations would be very helpful for future projects. Facilities made an effort to mirror ConnectND PeopleSoft as much as possible but the unavailability of NDUS and HECN resources made it difficult to tap into existing knowledge and experience."

Overall Survey Rating:

2.39

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

C. RISK MANAGEMENT

Risks were managed through identification by the project team and tracked through use of a Risk Log. Risks that had been identified and during the course of the project became a reality were moved to an Issue Log where they were tracked, assigned to someone to resolve, and included the resolution or actions taken. Eleven items were identified as risks to be aware of with five becoming an issue. There were additional "issues" logged that were not identified risks; however, this is normal as the Issue Log allowed for closer tracking of those items.

The identified risk that had become an issue dealt with resource constraints due to the PeopleSoft project. Because the PeopleSoft project implementation was extended, development and other project staff were not available to develop interfaces between the Facilities Management System and PeopleSoft in the timelines that had originally been planned. This caused a concern that the "go-live" might be impacted if not resolved. One member of the project team stated in their Post-Implementation survey, "Risks related to the unavailability of ConnectND and HECN people resources should have received more attention." When asked the question of "To what extent was the evolution of risks communicated" one respondent stated, "Communications lines were continuously active and used." Another stated "Core Team meeting typically discussed risks as they appeared on the report" when answering the same question.

Overall Survey Rating:

2.61

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

D. COMMUNICATIONS MANAGEMENT

Several methods of communications were used on this project. A “kick-off” meeting was held which laid out the process early in the project so that team members had an idea of what to expect. Listservs were established for the Core Team and the Steering Committee. These listservs were used extensively by the team members.

The Project Manager kept the teams informed and status reports were used to keep all stakeholders informed. While some respondents felt information was being kept from them, one respondent stated, “When asked we got a response. The items we didn’t ask about we never heard about.” Another respondent when asked about communications stated, “Good. I always received info from my team leader in a timely manner.” One commented that, “Not all information was routinely routed to all stakeholders.” “Information/decisions by the Steering Committee were not always relayed downward in a timely and consistent manner.”

One respondent pointed out that the “Action Lists” were a good tool. This person also stated that, “Actions lists were helpful as were Core Team meeting minutes which were available on the web page. We could review project status and minutes on the web page which was helpful.” Another commented that the, “Web site was helpful as long as it was updated in a timely manner.”

For the question, “How effective were the informational materials available to orient team members?” a respondent stated, “Would have liked more information at the beginning of the project on what features and capabilities the system had. I believe this would have made the project go quicker & smoother.” Another respondent stated, “Better training, definition/explanation of expectations and responsibilities needed.” Other comments included, “I thought the initial training was very limited. When we went through ‘train the trainer’ training, some of the documents (i.e.

navigation tools, FAMIS basics) would have been very helpful to have from Day 1, not month 12 (or learning by trial & error)."

When asked "How satisfied were you with the kick-off meetings you participated in?" stated, "The change with the Steering Committee that occurred at kick off was a bit unsettling; but overall, we ended up in the right place." Another stated, "Information was given out to those affected by this change (replacement of the system). I think this was a good process to help prepare user and generate interest and questions about processes that we would need to consider during testing the system."

Overall Survey Rating:

2.24

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

E. ACCEPTANCE MANAGEMENT

The use of a formal process for signing off on deliverables is a must for ensuring that a project deliverable was tested and met the needs of the project members.

When asked the question, "How effective was the acceptance management process?" one respondent stated, "Flow charts, actions items, testing documents were all fine. Reports and interfaces...not so much."

In response to the question, "How well prepared were you to accept project deliverables?" one respondent stated, "As we went through testing procedures and learned more about the system, I felt we knew enough about that procedure to continue to the next item or procedure."

For the question, "Was sufficient time allocated to review project deliverables?" one respondent stated, "We could have used more time. The lack of time to meet regular (normal department duties) and FAMIS job duties was a problem throughout the whole project." Another stated, "Yes, although I feel testing scenarios could have been handled better within the FAMIS project. I feel that cross-training between teams should have been more of an option earlier in the process. It would have been nice to know

how each piece affects the whole picture, instead of having someone who may have viewed it once and try explaining it to me.”

Overall Survey Rating:

2.16

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

F. ORGANIZATIONAL CHANGE MANAGEMENT

Preparing an organization for the change a project will have on them is one of the harder aspects of project management. Acceptance of change varied from campus to campus. For this section I’ve included below several of the comments that individuals stated in their Post-Implementation survey.

Several respondents identified training as a change management issue. One of the respondents stated, “I believe fair notice was given to those of us who were involved in the initial project. However, I felt that the remainder of the end users were not given training – either with FAMIS & basic computer skills.” Another stated, “More team cross-training would’ve been helpful.” While one respondent stated, “I would say sufficient training was given; however, it could have been better.” Another stated, “Training for general employees should have been more specific to their daily duties and should have included their actual log-in and set-up information.” There were several that felt more basic computer skills should have been taught to the staff in Facilities.

As a final comment to this section, I offer the following from one of the respondents when asked, “How effective were the techniques used to prepare you and your organization for the impact of the changes brought about by the new system?” they stated, “I believe they worked well. We can always improve; but overall, results appear to be good. This leads me to believe that techniques used were effective.”

Overall Survey Rating:

2.07

- Scale of 1 – 3, with 1 being low and 3 high

- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

G. ISSUES MANAGEMENT

Issues that were identified were tracked through the use of an Issues Log. This log is a critical project management tool to ensure that someone has been assigned to resolve the issue, report on progress of the issue, and maintain a vigilance that the issue has been acted upon to resolution.

During the lifetime of the project implementation, fifteen issues were logged with each having been resolved prior to “go-live.”

There were differences in how respondents perceived how issues were handled. One respondent stated, “There was little consistency in dealing with the issues throughout the project. Some issues were glossed over until the lack of a decision hindered the project.” Another commented that, “Issues at times were slow to be resolved and at times seemed to be avoided.” At the same time, others provided comments such as, “Issues were brought to the Facilities Project Manager and his role brought it to the next level. It was handled effectively.” Another commented, “All through Dev our Project Manager took care of Issues before they could escalate.”

When asked, “How effective were issues able to be resolved without impacting the Project Schedule or Budget?” they said, “The unavailability of NDUS (HECN), ConnectND, and Facilities resources impacted both budget and schedule.”

Overall Survey Rating:

2.15

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

H. PROJECT IMPLEMENTATION AND TRANSITION

The transition from implementation to operational phase of this project went fairly smooth. This could be attributed to the efforts of the Project Manager,

campus Functional Administrators, Core Team members, and the vendor personnel. Most individuals involved on this project worked diligently to make the project “go-live” a success.

Training occupied most comments for this section. Documentation provided at the start of the project seemed to be a concern. One respondent commented, “Initially received very little documentation – that could definitely be an area that should be improved.” A second respondent commented, “The items received with the system were non-existent. If there was any type of documentation that came with the system, I did not receive them. However, the user manuals that were handed out to the end users are exceptional.” A respondent stated, “Training materials were very good. We made the decision to train by role rather than by team, so we had to tweak the manuals to accommodate that. As usual, there wasn’t a lot of time to accomplish this.”

When asked the question, “How effective was the support you received during implementation of the system?” one respondent summed it up with, “The on-site support was very good. The staggered go-live was very beneficial for all campuses, as we had access to FAMIS for 6 days. Even when FAMIS was at another site, we could still get our questions answered. The support from the other campuses also was a huge help.”

Overall Survey Rating:

2.29

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

I. PERFORMANCE OF PERFORMING ORGANIZATION

One of the problems that impacted this segment of the project was the fact that the ConnectND PeopleSoft project took up time from many of the same individuals that needed to contribute to this project. The PeopleSoft project stretched resources (in this case mainly personnel) thinly.

One respondent replied when asked, “How effectively and consistently was sponsorship for the project conveyed?” stated, “It seemed that awareness of the impact and scope of the project for each campus was ignored at times.” Another commented, “All teams knew this was a University System

implementation. It was not always easy to remember standardization in the early days, but as time went on, it became very clear to me that the goal is standardization.”

When asked, “How smooth was the transition of support from the Project Team to the NDUS and Institutions?” another respondent commented, “I do not think HECN was expecting what we brought forward. They were too occupied by other things (this reference was to the ConnectND project).”

An additional area that should be mentioned here is the role of “Functional Administrator” at each campus Facilities department. This role was felt to be essential by the vendors who responded to the RFP in order for the campuses to be successful. It took a considerable amount of time to make the determination that this role was required; however, by the time of go-live, the Facilities Steering Committee approved this role.

Overall Survey Rating:

2.12

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

J. PERFORMANCE OF PROJECT TEAM

The efforts put forth by most of the Project Team members, vendor personnel, and the Project Manager made this a successful project.

Many of the survey respondents when asked, “Overall, how effective was the performance of the Project Manager?” commented they felt he performed his role well. While one respondent expected something different and more of a team approach, others responded with comments as such as, “Overall, I thought he served our team well.” “Overall, Project Manager performed well. Quickly determined that no one in their right mind wants this job. But, if stuck with it they must strive constantly to remain and appear impartial.” And, “The Project Manager did a very good job with keeping the teams on track, which is not an easy thing to do.”

Asked the question, “How well were your expectations met regarding the extent of your involvement in the project (effort, time commitment, etc.)?”

responses included, "As is typical with this type of project there is always an under estimating of time commitment needed at the beginning." "This project got a bit overwhelming at times as I had to keep my same duties and deadlines – and received no additional compensation." "Because of lack of adequate staff in our institution, we had to delay many projects related to our regular duties. For any future projects of a large scope, I would recommend more planning and additional staffing for the additional project's workload."

When asked, "How effective was each Project Team member in fulfilling his/her role?" comments included, "They handled this undertaking quite well I thought." "I believe the people involved with this project put forth a very good effort to meet their regular duties and still do a good job on the FAMIS project." "Some excelled and others were adequate but overall they achieved the objectives." "Some team members were very effective in their role, and others were not. Early on, it was difficult for some team members not to think of just "their" campus' needs, but I believe this was accomplished for the most part."

Overall Survey Rating:

2.24

- Scale of 1 – 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

K. KEY PROJECT METRICS

Cost

The original budget for this project, in new funds, was \$1,274,531 and with "in-kind" staffing support the total was \$1,425,835. The cost at completion was \$1,466,521 and with "in-kind" contributions the total was \$1,560,143.

There were several change orders that had a direct impact on the budget which were approved by the Steering Committee. This project overran the original budget estimates. The majority of the cost overrun was incurred due to unavailability of in-house development staff to develop interfaces and reports that were necessary for go-live.

The overrun was funded from contingency funds remaining on other ancillary systems, such as the Parking and Housing Management Systems. These systems were being funded mostly by the same mechanism of student fees.

Schedule

The schedule remained on track as approved by the facilities Steering Committee with completion of all institutions involved "live" by July 13, 2005 as planned.

Scope

The scope of the project had been changed as the Steering Committee approved.

Quality

This project has met the anticipated benefits outlined in the original Business Case. The FAMIS Software, Inc., Facilities Management System has been interfaced with the PeopleSoft system, has improved efficiencies, and enabled new functionality.

As the Facilities staff becomes more familiar with their system, productivity will increase and the Facilities department will be able to provide better services to those seeking services through the department.

L. LESSONS LEARNED

Three questions were asked of the team members which reflects on lessons learned. These questions are listed below and comments are included with each.

What were the most significant issues on this project?

"Time commitments and workload on our campus was a significant issue. We were short staffed to begin with."

"The need to stay on schedule to meet the go-live date was very important."

"At go-live the system crashed quite a bit which was frustrating. Currently, this is more stable."

"Communication from teams or individuals to campus stakeholders was discouraged unless it filtered through Project Manager. Caused some stakeholders to feel they were purposely kept in the dark as to impact of new system."

"Probably the single most difficult thing to accomplish was standardization. It was very difficult from day one to create software that could meet all campus' needs, but I believe this was accomplished for the most part."

"Did not like the process that FAMIS set up as a method to deal with a project. There should have been more interacting of the teams."

"Once the business practices were set up they (teams) should have been able to see the affect of other teams on what they were doing. That takes place now in a change that seems counter productive."

"The 'domino' effect of PeopleSoft issues and the support that HECN was not able to provide to the FAMIS project."

"Attempting to resolve how the long-term processes will work and how to implement the system to other campuses."

"The lack of answers after go-live. We have a large list of questions that have not been answered yet."

"Interfaces, reporting, configuration."

"Time frame, ongoing duties, training, interface problems, lack of useful reports, making the configuration 'fit' for 3 institutions and ultimately the University System."

"I feel that the lack of communication from all on this project was a major issue. There were many times I was out of the loop on things, or was not given proper information due to my 'status' on this project."

"The unavailability of ConnectND and HECN resources, including a project manager for HECN resources, placed a greater project workload on the Facilities Teams."

"System was implemented as a single organization which caused problems because of the disparity in how the same functions are handled between the institutions involved in the implementation. Standardization was not mandated thus addressing the needs of each institution was very difficult."

"Accounting issues identified should have been completely solved prior to implementation as they are so important throughout the entire system."

What were the lessons learned on this project (from things that didn't go well)?

"All things considered, I think the project went well because people made the commitment to get it done. We needed a replacement system and I think this system will meet our needs. I think everyone involved should be commended for getting this project up and running within the time frames and close to the original budget."

"I think at times it would have been helpful to have more direct involvement with an HECN representative to help sell the 'standardization' requirement."

"Multi-org was not good – as business practices vary between campuses, which makes it hard to streamline processes."

"Standing work orders were not in place. Temp help assigned to work orders caused delays at UND."

"Need clear understanding of what role each team (individual, core, functional, project manager, steering) has at the beginning to avoid confusion as to where authority and responsibilities lay during the process."

"If possible have the Project Manager from a neutral site or dept as possible preferably from a dept outside of the subject matter. If not, there is always a feeling of preference even if there really is not and no matter what site they come from."

"I would like to see a neutral person be the project manager. One that did not have any tie with the schools. I'm not saying we had a project manager that was not neutral but the perception even if there is none is always there. If that person is from an area that has no ties at all it is accepted more readily. I feel this was the major decision that we should of changed because it affected the success of the project."

"Project manager should be a neutral party to avoid any confusion or conflicts between institutions."

"The lack of understanding on people's part of what a software system implementation needs to be successful. Having legacy for so many years did not prepare people for the on-going, long-term needs of a 21st century software package and its intricacies."

"Creating a generic, vanilla system/process for many campuses was very challenging. We do have a system that met our goal, but it is a system that does have limitations for the individual campuses. It was difficult for some people to look at this as a NDUS system-wide implementation and not something specifically for the individual institution."

"I would have spent more time in cross team meetings. There were decisions made that affected teams and the team most affected was not involved."

"Should have a site that the crew could go in and practice with test data."

"Training should include actual and specific information for the end users."

"Compromise is needed to make a system work university system wide."

"The overall thing I would have done differently is use the multi-org feature of FAMIS. We should have gone down the path like we did for implementation, but then copied the configuration into another org for each campus. This would've forced us to conform to the same basic process, but allowed us to each be separate on FAMIS. I think this is going to cause more problems, extra work down the road than we anticipated."

"MULTI-ORG....not Single Org. All three institutions are so different that the Single Org unit is not worth the headaches, the arguments, and the stress."

What on this project worked well and was effective in the delivery of the system?

"JIT/JET training plan was effective."

"This was an incredible opportunity to be involved in this project and the growth in each individual involved was awesome."

"We all learned how to compromise, how to express ourselves in a positive manner, how to be courteous of other team members, and how to juggle a mammoth project along with our other responsibilities."

"The system seems to work well in the areas that I'm involved with. From what I hear in other areas, there are some minor problems that will be resolved as they come up."

"The delivery to the end users went better than I expected."

"There are still some problems in those (end-users) areas with maintenance staff usage, but that seems to be improving as the staff get use to using it."

"More training time for staff would probably been helpful."

"The project worked well in that we accomplished a huge amount of work in a short amount of time."

"I believe the most effective part of this entire project was the camaraderie that grew out of working together. The respect between team members has grown immensely over the course of the project."

"Working closely with other Teams kept the focus on track."

"Simply keeping everyone informed with the most updated info is a must!"

"Time spent with vendor representative during site visits were most productive and brought out most issues that needed to be resolved."

"The training on each campus went well in that we were able to train our people individually and we could put our own twist on what and how to execute FAMIS. The training wasn't 'canned' as NDUS training."

"The expertise the project team brought to the project in their subject areas was excellent. These are people that knew the good/bad points of legacy and worked diligently to create our final product."

"The team members put in a lot of time, endured a lot of stress, and worked through many issues of not only developing the team concept but also meshing different experiences, skills and personalities into an effective team."

"The team meetings."

"The monthly meetings with Mike (FAMIS), training, and group meetings."

"The FAMIS consultant was very good and had practical ideas when presented with problems."

"We had a difficult task in getting the three institutions putting together a business plan that works for all. I was surprised as how well the group worked together. I see this group in the future working very closely with each other."

"The Project Teams worked extremely hard. They successfully took on the complicated process of providing one system that could be used interchangeably at all campuses. The Teams did this while also providing for the business process needs of their own individual campuses."

"There are many successes among the Teams and their members. They developed, learned and applied new functionality, processes, business rules, roles, and terminology. And, they've tried to give up some things in the process. These Teams deserve much credit for the success of this implementation and for providing NDUS Physical Plant/Facilities departments with quality systems and processes. Their continuing efforts will ensure that the NDUS Facilities Management System will expand in both use and available functionality well into the future."

"The selection of a vendor with proven Higher Education experience and commitment, along with the expectation that this would be a long-term relationship, was significant to the success of the project. Having a strong, international, and mainly Higher Education user community, will allow NDUS users to share and learn with others who have many common experiences. Users will be comfortable promoting changes to the application that they know will receive a fair hearing among their peers."

"The emphasis by FAMIS on the business processes unique to Universities and Colleges was evident in the functionality of the system, the approach to implementation, the user group conferences and in their Project Manager/Consultant who had a background of several years experience in University Facilities Management. I am confident that the importance of this will be seen many times in the future as more of the system is implemented and as users take advantage of more of the system functionality."

APPENDIX A

Purpose

The purpose of the Post-Implementation Survey is to collect feedback from project team members (the Steering Committee, Core Team, and Technical Team) about the success of the implementation. Survey responses will be summarized into a Post-Implementation Report, which will be available at a later date.

Instructions

1. Answer each question by entering a rating and comments. Please be honest and sincere. Your feedback will create valuable information for future NDUS projects and your individual responses will be kept confidential.
2. If you do not understand the question or it is not applicable to your role, enter N/A for a rating and N/A under comments.
3. There is a "General Questions" section on page 8 that is appropriate for general issues and lessons learned. This area should help you share information not covered in a specific question.
4. Contact Rich Lehn with any questions at 777-3756 or richlehn@mail.und.nodak.edu
5. Return the survey by **(DATE OF RETURN)** via email to Rich Lehn at richlehn@mail.und.nodak.edu
6. THANK YOU for your participation!!

Date:

Name:

Institution:

Department:

Role on Project:

| Questions | Rating (1 – 3) 1 is low and 3 is high | Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) |
|--|--|--|
| SYSTEM EFFECTIVENESS | | |
| 1. How well does the system meet the stated needs of the NDUS? | | |
| 2. How well does the system meet your needs? | | |

| Questions | Rating (1 – 3) 1 is low and 3 is high | Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) |
|---|--|--|
| 3. When initially implemented, how well did the system meet the stated needs of the NDUS? | | |
| 4. To what extent were the objectives and goals outlined in the Business Case and Project Charter met? | | |
| 5. What is your overall assessment of the outcome of this project? | | |
| 6. How well did the scope of the project match what was defined in the Project Proposal? | | |
| 7. How satisfied are you with your involvement in the development and/or review of the Project Scope during Project Initiation and Planning? | | |
| COST, SCOPE, SCHEDULE, AND QUALITY MANAGEMENT | | |
| 8. Was the Change Control process properly invoked to manage changes to Cost, Scope, Schedule, or Quality? | | |
| 9. Were changes to Cost, Scope, Schedule, or Quality, effectively managed? | | |
| 10. Was the established change budget adequate? | | |
| 11. As project performance validated or challenged estimates, was the change control process used when appropriate and were challenges effectively managed? | | |

| Questions | Rating (1 – 3) 1 is low and 3 is high | Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) |
|---|--|---|
| 12. How effectively was the Quality Management Plan applied during Project Execution? | | |
| 13. How effective was the quality assurance process? | | |
| 14. How effective were project audits? | | |
| 15. How effective was the utilization of Best Practices from prior projects in the NDUS and Institutions? | | |
| RISK MANAGEMENT | | |
| 16. How well were team members involved in the risk identification and mitigation planning process? | | |
| 17. To what extent was the evolution of risks communicated? | | |
| 18. How effectively was the Risk Management Log updated or reviewed? | | |
| 19. How comprehensive was the Risk Management Log? (i.e. did many events occur that were never identified?) | | |
| COMMUNICATIONS MANAGEMENT | | |
| 20. How effective were the informational materials available to orient team members? | | |
| 21. How satisfied were you with the kick-off meetings you participated in? | | |

| Questions | Rating (1 – 3) 1 is low and 3 is high | Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) |
|--|--|--|
| 22. How effectively were the project team meetings conducted? | | |
| 23. How effectively and timely were Progress Reports provided by Team Members to the Project Manager? | | |
| 24. How effectively were stakeholders involved in the project? | | |
| 25. Was communication with stakeholders (president, vice presidents, other directors, end users) adequate? | | |
| 26. How well were your expectations met regarding the frequency and content of information conveyed to you by the Project Manager? | | |
| 27. How well was project status communicated throughout your involvement in the project? | | |
| 28. How well were project issues communicated throughout your involvement in the project? | | |
| 29. How well did the Project Manager respond to your questions or comments related to the project? | | |
| 30. How useful was the format and content of the Project Status Report to you? | | |
| 31. How useful and complete was the project repository? | | |

| Questions | Rating (1 – 3) 1 is low and 3 is high | Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) |
|--|---|---|
| ACCEPTANCE MANAGEMENT | | |
| 32. How effective was the acceptance management process? | | |
| 33. How well prepared were you to accept project deliverables? | | |
| 34. How well defined was the acceptance criteria for project deliverables? | | |
| 35. Was sufficient time allocated to review project deliverables? | | |
| 36. How closely did deliverables match what was defined within Project Scope? | | |
| 37. How complete/effective were the materials you were provided in order to make a decision to proceed from one project lifecycle phase to the next? | | |
| ORGANIZATIONAL CHANGE MANAGEMENT | | |
| 38. How effectively and timely was the organizational change impact identified and planned for? | | |
| 39. How pro-active was the Organizational Change Management Plan? | | |
| 40. Was sufficient advance training conducted/information provided to enable those affected by the changes to adjust to and accommodate them? | | |

| Questions | Rating (1 – 3) 1 is low and 3 is high | Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) |
|--|---|---|
| 41. Overall, how effective were the efforts to prepare you and your organization for the impact of the new system? | | |
| 42. How effective were the techniques used to prepare you and your organization for the impact of the changes brought about by the new system? | | |
| ISSUES MANAGEMENT | | |
| 43. How effectively were issues managed on the project? | | |
| 44. How effectively were issues resolved before escalation was necessary? | | |
| 45. If issue escalation was required, how effectively were issues resolved? | | |
| 46. How effectively were issues able to be resolved without impacting the Project Schedule or Budget? | | |
| PROJECT IMPLEMENTATION & TRANSITION | | |
| 47. How effective was the documentation that you received with the system? | | |
| 48. How effective was the training you received in preparation for the use of the system? | | |
| 49. How useful was the content of the training you received in preparation for the use of the system? | | |

| Questions | Rating (1 – 3) 1 is low and 3 is high | Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) |
|---|--|--|
| 50. How timely was the training you received in preparation for the use of the system? | | |
| 51. How effective was the support you received during implementation of the system? | | |
| PERFORMANCE OF THE PERFORMING ORGANIZATION (NDUS AND THE INSTITUTIONS) | | |
| 52. How effectively and consistently was sponsorship for the project conveyed? | | |
| 53. How smooth was the transition of support from the Project Team to the NDUS and Institutions? | | |
| 54. Did the Project Team adequately plan for and prepare the Institutions for their ongoing responsibilities for the product or service of the project? | | |
| PERFORMANCE OF THE PROJECT TEAM | | |
| 55. Overall, how effective was the performance of the Project Manager? | | |
| 56. How well did the Project Team understand the expectations of their specific roles and responsibilities? | | |
| 57. How well were your expectations met regarding the extent of your involvement in the project (effort time commitments etc.)? | | |
| 58. How effective was each Project Team member in fulfilling his/her role? | | |

| Questions | Rating (1 – 3) 1 is low and 3 is high | Comments (What worked well? What could have been done better? What recommendations do you have for future projects?) |
|--|---|---|
| 59. How effective was team member training? | | |
| GENERAL QUESTIONS | | |
| 60. What were the most significant issues on this project? | | |
| 61. What were the lessons learned on this project (from things that didn't go well)? | | |
| 62. What on the project worked well and was effective in the delivery of the system? | | |